

ENGAGE

Empowering the Next Generation in Agriscience with Genomics Education Houston Community College

USDA/CSREES Priority Area

Genomics and Food and Fiber Production

Partners

USDA-ARS
Children's Nutritional Research Center
Texas A&M University

Award

\$247,500

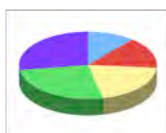
HCC Credit Student Profile

Gender



■ 59.3% Female
■ 40.7% Male

Ethnicity

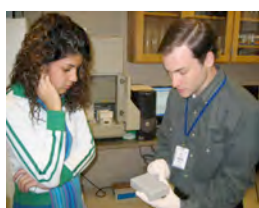


■ 27.6% Hispanic
■ 25.9% African American
■ 20.0% Caucasian
■ 15.4% Other
■ 11.1% Asian/Pacific Islander

Objective 1:

Raise HCC students' and community awareness of biotechnology and agricultural science careers

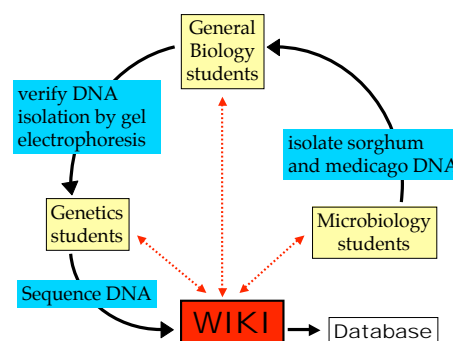
- USDA Career Day
- Hands-on DNA Day for friends and family
- Field trips
- Research seminars
- Project web site
- HCC TV interviews



Objective 2:

Increase HCC students' research interest and scientific competence

- Collaborative research project across HCC biology curriculum: Genetics students sequence cloned sorghum and medicago DNA isolated by Microbiology students and verified by General Biology I students. Students add data and communicate by WIKI. Data is submitted to sorghum and medicago genomic databases.



- Sorghum genotyping research project by Genetics students
- Hands-on phylogenetic verification of local sushi sold as salmon by General Biology II students
- Research internships

Objective 3:

Update faculty knowledge and skills in the area of genomics and biotechnology

- Faculty workshops
- Equipment lending library for HCC and area high schools

Impact

- 1537 HCC student participants
- Permanently improved HCC science education
- Feed agriscience pipeline with highly trained underrepresented minority students